

Risk assessment across life cycle phases for small and medium software projects

ABSTRACT

Risk is labelled as an undesirable event that is encountered by every project irrespective of industry. Most software projects fail to meet the planned targets, i.e., scope, time, cost and quality. Software projects faced a wide range of risks and all risks cannot be dealt with the same priority. Risk can be prioritized by the probability of its occurrence and its impact. Therefore, risk assessment is required to highlight and prioritize serious risks. However, a very few researches targeted risk assessment faced by small and medium software projects. This research performs a risk assessment and highlighted serious risks faced by professionals working on small and medium software projects by documenting probability and impact. The chances of success of software projects can be increased by performing a proper risk assessment. The risks are identified by exploring and reviewing the existing literature. The identified risks are grouped by life cycle phases. This research utilizes a questionnaire-based approach to record the response of 163 software professionals working in Pakistan software industry. SPSS is used for data management and for performing statistical analysis. Probability and impact of each risk are measured to highlight the potential risks. The results concluded that the severity level of the majority of risks faced by small and medium software projects in Pakistan software industry is significant and high. The success of every project matters a lot for the progress of the organizations working on a small and medium level. Therefore, this research guide professionals and organizations to consider and prioritize the risk faced while working on small and medium software projects to increase the chances of the project's success.